



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,884	02/09/2006	Hermanus Franciscus Maria van Meijl	58766US004	5378

32692 7590 10/02/2006

3M INNOVATIVE PROPERTIES COMPANY
PO BOX 33427
ST. PAUL, MN 55133-3427

EXAMINER

TA, THO DAC

ART UNIT PAPER NUMBER

2833

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/567,884	Applicant(s) VAN MEIJL, HERMANUS FRANCISCUS MARIA	
	Examiner Tho D. Ta	Art Unit 2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,6 and 10-19 is/are rejected.
- 7) ☒ Claim(s) 2-5 and 7-9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/9/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 6, 10-15, 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Shepherd (5,997,348).

In regard to claim 1, Shepherd discloses a connector shell for a multiple wire cable assembly having multiple ground conductors and signal conductors, the connector shell comprising: a housing 1 having a ground potential, a multitude of contact elements 34, 15 arranged in a longitudinal array, the contact elements being provided for making electrical contact to contact elements of a mating connector and comprising: grounding contact elements 34 for connecting to the ground conductors 8 of cables of the multiple wire cable assembly 4 and signal contact elements 15 for connecting to the signal conductors 6, 7 of the cables of multiple wire cable assembly 4, a longitudinal grounding plate 24 extending along and in the longitudinal direction of the array of the contact elements, the grounding plate 24 having two lateral edges at least one of which is provided for electrical connection to the ground potential of the housing 1, wherein the grounding plate 24 comprises throughholes 28 having the grounding contact elements 34 extending therethrough, and wherein the grounding contact elements 34 frictionally engage the grounding plate 24 within the through holes 28 and

Art Unit: 2833

the grounding contact element 34 connects directly to the ground conductors 8 of the cables.

In regard to claim 6, Shepherd discloses the longitudinal array of the contact elements comprises at least one row of grounding contact elements 34 and at least one row of signal contact elements 15, the rows of grounding and signal contact elements 34, 15 being arranged adjacent to each other.

In regard to claim 10, Shepherd discloses the grounding contact elements 34 are frictionally received in the respective through holes 28 of the grounding plate 24 for making mechanical and electrical contact with the grounding plate 24 within the respective throughholes 28.

In regard to claim 11, Shepherd discloses at least the grounding contact elements 34 comprise grounding pins.

In regard to claim 12, Shepherd discloses the grounding pins 34 are designed as compliant pins.

In regard to claim 13, Shepherd discloses the grounding plate 24 comprises an electrically conductive layer.

In regard to claim 14, Shepherd discloses the electrically conductive layer 28 extends into the throughholes receiving the grounding pins 34.

In regard to claim 15, Shepherd discloses the grounding plate 24 is made from electrically conductive material, in particular metallic material.

In regard to claim 17, Shepherd discloses a socket connector 10 having a plurality of contact elements wherein each contact element comprises a contact pin 15 and a socket 28 for receiving a contact pin of a mating connector.

In regard to claim 18, the recitation "coaxial cables or twinaxial cables" has not been given a significant patentable weight because it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

In regard to claim 19, Shepherd discloses the contact elements 15, 28 are provided for receiving terminal connectors having a housing of electrically conductive material, at least one signal contact element arranged within the housing and electrically insulated relatively to the housing and electrically connected to a signal element of the array of contact elements and at least one ground contact element arranged within the housing as well as electrically connected thereto and electrically insulated relatively to

Art Unit: 2833

the signal contact element of the housing and electrically connected to a grounding contact element of the array of contact elements.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd in view of EP 0 952 637 A1.

Shepherd does not disclose that the housing 1 comprises a first half and a second half, at least the first housing half comprising an electrically conductive material, and wherein the grounding plate 24 along its grounded longitudinal edge mechanically and electrically contacts the first half.

EP 0 952 637 A1 discloses that the housing comprises a first half 3a and a second half 3b, at least the first housing half 3a comprising an electrically conductive material, and wherein the grounding plate 10a along its grounded longitudinal edge mechanically and electrically contacts the first half 3a.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shepherd's invention by constructing the housing as discloses by EP 0 952 637 A1 in order to conveniently access the components within the housing when it is needed.

Allowable Subject Matter

5. Claims 2-5, 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: In regard to claim 2, the prior art fails to provide, teach or suggest the grounding plate has at least one cut-out section having the signal contact elements extending therethrough without contacting the grounding plate. In regard to claim 3, the prior art fails to provide, teach or suggest the grounding plate has several cut-out sections and wherein each of the cut-out sections has at least one signal contact element extending therethrough without contacting the grounding plate. In regard to claim 7, the prior art fails to provide, teach or suggest the grounding plate comprises a cut-out section having extending therethrough the signal contact elements of the signal contact element row opposite to the grounded lateral edge extend.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho D. Ta whose telephone number is (571) 272-2014. The examiner can normally be reached on M-F (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 ext 33. The fax phone

Art Unit: 2833

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



THO D. TA
PRIMARY EXAMINER